

Dynamic Physical Education Lesson Plans for Elementary and Secondary School Students[®]

Converting Steps to Miles Grades 4-12

Objectives:

To be able to convert total steps to distance covered in miles

To be able to calculate miles per hour based on the distance covered in a selected time period

Equipment Required:

One pedometer for each student

Belts for pedometers (if needed)

Converting steps to miles record sheet

Pencils

Containers for pedometers

Instructional Activities	Teaching Hints
<ol style="list-style-type: none"> 1. Have students place the pedometer in the step count mode and reset them. 2. Tell students they will walk for 10 minutes. Ask them to guess how far (in miles) they will be able to walk in that amount of time. 3. Students will walk for approximately 10 minutes. The purpose of the activity will be for each student to see how far they actually travel in relation to their guess. 4. Stop the class at the end of the 10 minute walking period and have students open their pedometers and check the number of steps they accumulated on their calculation sheet. 5. Ask students to multiply the number of steps they accumulated by their stride length (determined in the previous activity). Convert the distance to mileage by dividing their distance in feet by 5,280. To calculate their miles per hour, have students multiply their distance in miles by 6. That will be their speed if they have walked 10 minutes as described in Step 2. 	<p>This activity is for middle/high school students.</p> <p>Any amount of time is satisfactory. The purpose of the activity is to teach students an understanding of how far they walk in a certain amount of time.</p> <p>Moderate to vigorous activity is often defined by walking 3 to 3.5 miles per hour.</p> <p>If possible, have students walk on different terrain, uphill and downhill. This will help them understand how hills and valleys can impact their walking speed. For example, hikers and mountain climbers would not cover that much distance because of the rough terrain.</p>

Convert Steps to Miles

1. Reset your pedometer to 0.

Your pedometer should be in "step" mode.



2. Walk 200 steps. Check your pedometer.

3. Multiply the **#** of steps by your stride length.

4. Convert the distance to miles.



You may
need a
calculator.

$$5280 \text{ Distance in Feet} = \text{Your Mileage}$$

Converting Steps to Miles

1. Multiply your number of steps times your stride length.

Steps X Stride Length (in feet) = Distance in Feet

2. Convert this answer (distance in feet) to miles by dividing 5,280 into the number of feet you walked.

$$5280 \overline{) \text{Distance in Feet}} = \text{Your Mileage}$$



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Converting Steps to Miles

3. Multiply your number of steps times your stride length.

Steps X Stride Length (in feet) = Distance in Feet

4. Convert this answer (distance in feet) to miles by dividing 5,280 into the number of feet you walked.

$$5280 \overline{) \text{Distance in Feet}} = \text{Your Mileage}$$



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Converting Steps to Miles

5. Multiply your number of steps times your stride length.

Steps X Stride Length (in feet) = Distance in Feet

6. Convert this answer (distance in feet) to miles by dividing 5,280 into the number of feet you walked.

$$5280 \over \text{Distance in Feet} = \text{Your Mileage}$$



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